HON. CHARLES A. VANIK

OF OHIO

IN THE HOUSE OF REPRESENTATIVES

Monday, October 5, 1970

Mr. VANIK. Mr. Speaker, in an effort to find a substitute for phosphates in detergents, new chemicals and compounds are being brought into the market which may well be more harmful than phosphates. There is theoretical evidence that one of the major replacements for phosphates—soon to come on the market in massive quantities—could cause cancer.

It has long been pointed out that phosphates are one of the major causes of eutrophication and pollution in lakes. They are one of the principal factors in algae blooms. The tremendous harmful effect that phosphates can have on lakes is well described by the April 1970 report of the International Joint Commission on Great Lakes problems.

The Canadian and American Commission members noted that—

> The pollution problem requiring the most urgent attention of the Governments of Canada and the United States is the increasing euthrophication of the Lower Great Lakes, particularly the western basin of Lake Erie.
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> In 1967, the input of total phosphorous from United States municipal sources to Lake Erie was 35.7 million pounds, of which 25 million came from detergents.
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> On the basis of the foregoing the Commission is convinced that the reduction of the phosphorus input into Lake Erie, Lake Ontario and the International Section of the St. Lawrence River will significantly delay further eutrophication and will allow the recovery to begin through natural processes.

It is entirely admirable that the detergent companies are trying to cut down on the percentage of phosphates in their products. The Department of the Interior, Consumers' Union, and others have made available to the public lists ranking detergents by their percent of phosphate content and it is encouraging to see the interest of the public in moving toward products which are less harmful to the environment.

But in our rush to stop one type of pollution, we must not jump from the fryingpan and into the fire.

What is being used as a replacement for phosphates? Is the replacement safe—perfectly safe? Are we sure that it does not have harmful genetic effects? Are we sure that the replacement does not lead to mutation over time.

This is a vital question—a question vital to the present quality of the environment and to future life.

There is a replacement to phosphate that both Proctor & Gamble and Lever Bros. appear to be moving toward. It is abbreviated as NTA—which stands for nitrilotriacetric acid.

Already there is some 50 to 100 million pounds of NTA being produced and poured into our waterways. If NTA is accepted as a substitute for phosphates, some 2 billion pounds will be produced and dumped into the Nation's waters each year.

When we deal with billions of pounds of a material, we must be sure that it is safe.

Yet there are recent indications that NTA, now coming into heavy production, is not safe.

I asked the Library of Congress specialist in environmental policy to comment on the safety of NTA. The specialist concluded:

> It is obvious to me from these conflicting reports that further research on NTA is necessary before we can declare it the perfect substitute for phosphates in detergents.

The Library cited a report in Environmental magazine of September 1970, written by Dr. Samuel S. Epstein, which pointed out:

> (1) not perfectly biodegradable—that is, capable of being broken down by bacteria. To quote Dr. Epstein, "concentrations of less than eight parts per million in raw sewage are ninety percent degraded in sewage treatment plants under the best conditions of sixteen parts per million, degradation is reduced to approximately 75 percent. In the absence of [favorable] conditions, NTA biodegradation can be reduced or almost nonexistent.
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> (2) potentially dangerous in concentrated forms, raising the question of its effect over time in less concentrated forms. For example, two year tests on rats seem to demonstrate that NTA does not cause cancer—but there was an increased mortality among male rats and kidney damage in male and female rats. In addition, zinc levels in bone tissue—and waste products was "markedly increased." As Dr. Epstein notes, "The significance of these findings has not yet been adequately evaluated."
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> (3) NTA is an agent that picks up and joins with metal ions. There are several possible dangers here. NTA may lead to heavy damage of metal pumping and sewer systems. More seriously from a health point of view, NTA may "pick up" heavy metal elements in the sediments of lake and riverbottoms and bring them back into the water supply. In other words, poisonous mercury which has settled out of the water could be reactivated by NTA in the water and brought back to our drinking taps.
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> (4) Finally, and most importantly, it is entirely possible that NTA, as it breaks down and forms and reforms into various com-

pounds, can form into an agent called introsamines—which is "highly" cancer-forming.

In checking with the Federal Water Quality Administration, and the Bureau of Water Hygiene, I have found that, because of limited funds, the first three difficulties mentioned above are being studied by the Federal Government but that the last problem, the problem of cancer produced by derivitates of NTA is not being studied. Officials at HEW admitted that, since testing for cancer is a long and involved process, that if they had the money they would—and should—begin checking the ways that NTA dissolves and the possibility that some of its forms can cause cancer. The officials pointed out that when it is proposed to dump 2 billion pounds of a chemical into the Nation's waterways, every safeguard and test should be made.

A lack of research funds in this area is so shortsighted as to be beyond belief. We may be literally poisoning ourselves and future generations to save a few dollars today.

In light of this shocking emergency situation, I am requesting the Bureau of the Budget to provide increased water hygiene research funds in a supplemental budget request.

In addition, I believe that it verges on criminal neglect for private companies to bring new chemicals and products into the marketplace without the most thorough testing, not only by the companies involved but by the Government. I am drafting legislation to require that no new chemical product or compound be brought into interstate markets without the prior approval of the Public Health Service and the Environmental Protection Agency that that product is not harmful to the environment or the health of the American people.